# Reliable supply and fault location in the low-voltage network



## SFC250 - SmartFuse 250

- Intelligent monitoring of the low-voltage network
- Minimised downtime
- Cable fault location with households connected
- Safe installation in the distribution box
- Intuitive user interface



## Intelligent monitoring of the low-voltage network

Requirements being made of the power grid are becoming increasingly demanding. A cost-efficient and efficient-to-use solution for ensuring the reliable supply of power consumers is becoming more and more important. The feed-in of renewable energies on the one side, and the various peak times on the consumer side, increase the necessity of an intelligent means of network monitoring. Minimising downtimes and maintaining the connection of consumers to the power network are further expectations needing to be satisfied.

The intelligent solution for this and many other problems is the SmartFuse250 made by Megger.

A reliable power supply and stability are the main criteria for consumers in the low-voltage network.

#### **Minimised downtime**

The clever use of the SmartFuse allows the power supply to be restored in the event of faults and overload. Configuring the connection of the power network using preset times, repeats and event reports being sent to the measuring technicians, or power utilities, increases the reliability and stability of the power supply for consumers.

## Cable fault location with households connected

In addition, the consumer does not, as is the case for classic fault location using high voltage, have to be completely disconnected from the power supply network.

In many cases, this is not even possible, because, for example, the residents are not home, making it impossible to prevent a danger of property damage to devices and the building installation. (In the event of an extended absence, or residents not being able to be contacted, it is not possible to locate the fault without excavation work.)

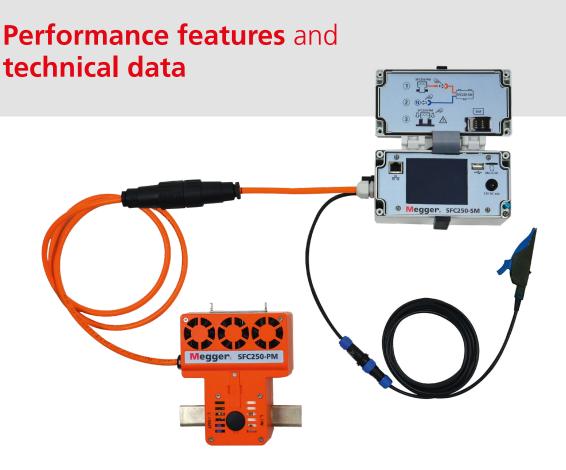
The pre-location of faults identified in the network can, when necessary, be carried out with the aid of the internal location algorithm or, optionally, a reflectometer connected externally.

Pinpointing is carried out using a remote control or using a mobile device with GSM reception (e.g. smartphone). The surge pulse triggered is located using a ground-borne sound microphone without having to completely disconnect the consumer.

### Interactive fault management

Alternative measures for fault rectification requiring the use of a test van can be planned for the medium term, as the SmartFuse assumes responsibility for "fault management" in the interim.





## **Technical data**

Power module	
Load current	max. 250 A continuous current
Short-circuit/surge current	max. 9000 A
Internal fuses	800 A; 1.25 A
Power-on capacity	200 kA
Display	LED for indicating the switching status
Housing dimensions (L x W x H)	129 x 155 x 82 mm
Weight	2.2 kg
Protection rating	IP 20
Compatibility	Fuse holder NH02 or NH03

Control module	
Control system	Colour touchscreen
Memory	Micro SD card, 16 GB
Display	Illuminated touch display LED for indicating the operating status (when the cover is closed)
Interface	<ul> <li>- GSM/UMTS modem (SIM card required)</li> <li>- GPS receiver</li> <li>- USB 2.0</li> <li>- WLAN/LAN</li> <li>- Wireless module (remote control activation)</li> </ul>
Housing dimensions (L x W x H)	160 x 97 x 87 mm
Weight	850 g
Protection class	
Protection rating	IP 42
Connections	- Neutral conductor connection - External trigger output - Connection coupling to the power module



#### **Technical data**

General	
Triggering threshold	10 A to 250 A
Restart attempts	0 – unlimited
Waiting time until restart	1 – 120 seconds
Surge energy control	1 – 4 half-waves
Phase angle control in the event of surges	Can be set
Operating and storage conditions	
Operating temperature: Operating humidity: Storage temperature:	-20 °C to +50 °C 50% at +40 °C 90% at +20 °C -25 °C to +70 °C
Memory for mains failure	Non-volatile event memory
Voltage supply power and control module	Direct mains supply 230 V 50 Hz/60 Hz
Power consumption	20 VA + 1 W/A load current

Remote control		
Power supply	2 x alkaline batteries 1.5 V/LR 6 (AA)	
Protection rating	IP 40	
Dimensions (L x W x H)	140 x 63 x 30 mm	
Weight (with batteries)	150 g	



## **Ordering information**

Product	Order no.
Smart Fuse 250 1-phase set (without fault location)	1006509
consisting of	
Power module	1005787
Control module	1005924
Remote control	1006110
Neutral conductor connection line	90015363
External power supply (EU plug) (for optional configuration of the device in the office)	820009756
Allen key (for replacing the main fuse in the event of a fault)	90015577
Transport case	90014263
Fuse 1.25 A (10 pcs)	90013082
optional	
Fault location option	90015840
Fuse 800 A	90007524

